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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,426	04/25/2001	Andrei V. Dorofeev	03226.554001	8550

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EXAMINER	
VO, LILIAN	
ART UNIT	**PAPER NUMBER**
2127	

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/843,426	DOROFEEV ET AL.	
	Examiner	Art Unit	
	Lilian Vo	2127	

-- The MAILING DATE of this communication appears on the cover sheet with the corr spondenc addr ss --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 12 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 5 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by White Paper ("Solaris Resource Manager – Controlling System Resources Effectively"), cited by applicants.

4. Regarding **claim 1,** White Paper discloses a method for allocating a percentage of system resources among a plurality of process groups in a computer system, said computer system comprising a plurality of CPUs, said plurality of CPUs combined into at least one processor set (page 2, paragraph 4, page 5, paragraph 4), said method comprising:

a. assigning each of said plurality of process groups a number of shares of at least one processor set (page 5, paragraphs 4th, 7th, page 6, paragraphs 1, 2, page 8, paragraph 1 and page 13, paragraph 4, and figs. 2-1 and 3-1); and

b. allocating said system resources of said at least one processor set to each of said plurality of process groups associated with said at least one processor set according to the number of shares assigned to each of said plurality of process groups associated with said at least one process set (page 5, paragraphs 4th, 7th, page 6, paragraphs 1, 2, page 8, paragraph 1 and page 13, paragraph 4, and figs. 2-1 and 3-1).

5. **Claims 5 and 9** are rejected on the same ground as stated above.

6. Claims 1 - 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Bitar et al. (US 6,714,960, hereinafter Bitar).

7. Regarding **claim 1,** Bitar discloses a method for allocating a percentage of system resources among a plurality of process groups in a computer system, said computer system comprising a plurality of CPUs, said plurality of CPUs combined into at least one processor set (col. 4, line 61 – col. 5, line 8, and fig. 1), said method comprising:

a. assigning each of said plurality of process groups a number of shares of at least one processor set (col. 4, lines 2 – 24, col. 4, line 54 – col. 5, line 8); and

b. allocating said system resources of said at least one processor set to each of said plurality of process groups associated with said at least one processor set according to the

number of shares assigned to each of said plurality of process groups associated with said at least one process set (col. 4, lines 2 – 24, col. 4, line 54 – col. 5, line 8).

8. Regarding **claim 2**, Bitar discloses the method of claim 1, wherein said system resources of each of said at least one processor set are allocated on a number of shares of all active groups within said each said at least one processor set (col. 4, line 54 – col. 5, line 8).

9. Regarding **claim 3**, Bitar discloses the method of claim 1, wherein said percentage of said system resources is calculated based on a ratio of the number of shares assigned to said each of said process groups to the number of shares of all active groups within said each of said at least one processor set (col. 4, line 54 – col. 5, line 8).

10. Regarding **claim 4**, Bitar discloses the method of claim 1, wherein each said process groups includes only one process (fig. 1).

11. **Claims 5 – 12** are rejected on the same ground as stated above.

Response to Arguments

12. Applicants' arguments filed 8/17/04 have been fully considered but they are not persuasive for the reason set forth below.

13. With respect to applicants' remark that "the examiner has incorrectly equated process groups with groups of users" (page 7, last paragraph), the examiner disagrees. Processes are

execute/run by users. Each user can have one or more processes running on the system. Thus, the terms process group and group of users are equivalent in this context. Furthermore, applicants' disclosure stated that the processes can be combined into aforementioned process groups based on various criteria, including, but not limit to, user id of the user executing the process, group id of the user executing the process (specification page 2, lines 18 – 20).

14. With respect to applicants' remark that "White Paper fails to teach allocating system resource using both process groups and processor sets" (page 8, lines 6 – 7), the examiner disagrees. White Paper teaches of the allocating CPU resource to process groups by shares using Solaris Resource Manager which complements a number of products such as processor sets that Sun offers for increasing resource availability (page 2, 2nd paragraph – 4th paragraph).

In addition, in response to applicants' argument that there is no teaching or suggestion about allocating resources using both process groups and processor set together because White Paper alludes to processors sets in one place and separately teaches system resource allocation based on the number of shares assigned to each group users (page 8, lines 8 – 12), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

15. With respect to applicants' remark that Bitar fails to teach or suggest the associating process groups (as opposed to individual job) with one or more processor sets, (page 9, lines 12 – 13), the examiner disagrees. Bitar clearly discloses the associating group of jobs with one or more processor sets in fig. 1, such that job (0) is associating to processor set VMP 22 with CPU 32a and 32b), and job (1) – job (5), group of jobs are associating to processor set VMP 24 with CPU 36.

Furthermore, applicants' arguments (page 9, lines 12 – 19) fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Product & Services: Chapter 8 – Fair Share Scheduler and SysAdmin Magazine and Galvin disclosed the allocating of processor set to the plurality of process groups according to the number of shares assigned to each process groups.

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Monday - Thursday, 7:30am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lilian Vo
Examiner
Art Unit 2127

lv
December 14, 2004

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